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AMENDMENTS TO THE CLAIMS

Following is a complete set of claims as amended with this Response. This complete set of claims excludes cancelled claims 24-27, 29, 30, and 40-45 and includes amended claims 4, 7, 13, 19, 25, 30, 32, 33, 35, 36, 38, 39, 42, 44, and 45.

1. (Cancelled)
2. (Previously Presented) A method as recited in claim 7 further comprising:
detecting a cardiac fibrillation;
administering a therapeutic shock to the heart of the patient at the adjusted DFSE set by the adjusting.
3. (Previously Presented) A method as recited in claim 7 further comprising:
detecting a cardiac atrial fibrillation (AF);
administering a therapeutic shock to an atrium of the patient at the adjusted DFSE set by the adjusting.
4. (Currently Amended) A method as recited in claim 7 further comprising:
detecting a cardiac ventricular fibrillation (VF);
administering a therapeutic shock to an a ventricle of the patient at the adjusted DFSE set by the adjusting.
5. (Previously Presented) A method as recited in claim 7, wherein the improved DFSE for the patient approximately corresponds with a defibrillation threshold (DFT) of the patient.
6. (Previously Presented) A method as recited in claim 7, wherein the improved DFSE for the patient approximately corresponds with an optimum DFSE of the patient.

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7. (Currently Amended) A method for determining an Improved defibrillation shock energy (DFSE) for a patient, the method comprising:

monitoring and tracking cardiac data of a patient by an implantable cardiac therapy device (ICTD);

analyzing such cardiac data by the ICTD;

automatically adjusting the DFSE to a level based on cardiac data so that the ICTD may deliver a therapeutic shock at an energy level approximating an improved DFSE for the patient;

wherein the cardiac data comprises data selected from a group consisting of cardiac rate, cardiac fibrillation rate, and ~~time~~ duration since last therapeutic shock.

8. (Previously Presented) An ICTD comprising circuitry that performs the method as recited in claim 7.

9. (Previously Presented) An ICTD comprising a computer-readable medium having computer-executable instructions that, when executed by a computer, performs the method as recited in claim 7.

10. (Previously Presented) A computer-readable medium having computer-executable instructions that, when executed by a computer, performs the method as recited in claim 7.

11. (Cancelled)

12. (Previously Presented) A method as recited in claim 13 further comprising:

detecting a cardiac atrial fibrillation (AF);

administering a therapeutic shock to an atria of the patient at the adjusted AF-DFSE set by the adjusting.

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13. (Currently Amended) A method for determining an improved atrial fibrillation defibrillation shock energy (AF-DFSE) for a patient, the method comprising:
monitoring and tracking cardiac data of a patient by an implantable cardiac therapy devices (ICTDs) , wherein such data comprises atrial activity data;
analyzing such cardiac data by the ICTD;
automatically adjusting the AF-DFSE to a level based on cardiac data so that the ICTD may deliver a therapeutic shock at an energy level approximating an improved AF-DFSE for the patient;
wherein the cardiac data comprises data selected from a group consisting of cardiac rate, cardiac fibrillation rate, and time duration since last therapeutic shock.

14. (Previously Presented) A method as recited in claim 13, wherein the improved AF-DFSE for the patient approximately corresponds with an optimum AF-DFSE of the patient.

15. (Previously Presented) An ICTD comprising circuitry that performs the method as recited in claim 13.

16. (Previously Presented) A computer-readable medium having computer-executable instructions that, when executed by a computer, performs the method as recited in claim 13.

17. (Cancelled)

18. (Previously Presented) A method as recited in claim 19 further comprising:
detecting a cardiac ventricular fibrillation (VF);
administering a therapeutic shock to an ventricle of the patient at the adjusted VF-DFSE set by the adjusting.

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19. (Currently Amended) A method for determining an improved ventricular defibrillation shock energy (VF-DFSE) for a patient, the method comprising:
monitoring and tracking cardiac data of a patient by an implantable cardiac therapy device (ICTD), wherein such data comprises ventricle activity data;
analyzing such cardiac data by the ICTD;
automatically adjusting the VF-DFSE to a level based on cardiac data so that the ICTD may deliver a therapeutic shock at an energy level approximating an improved VF-DFSE for the patient;
wherein the cardiac data comprises data selected from a group consisting of cardiac rate, cardiac fibrillation rate, and time duration since last therapeutic shock.

20. (Previously Presented) A method as recited in claim 19, wherein the improved VF-DFSE for the patient approximately corresponds with an optimum VF-DFSE of the patient.

21. (Previously Presented) An ICTD comprising circuitry that performs the method as recited in claim 19.

22. (Previously Presented) A computer-readable medium having computer-executable instructions that, when executed by a computer, performs the method as recited in claim 19.

23. (Cancelled)

24. (Currently Cancelled)

25. (Currently Cancelled)

26. (Currently Cancelled)

27. (Currently Cancelled)

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28. (Cancelled)

29. (Currently Cancelled)

30. (Currently Cancelled)

31. (Previously Presented) A method as recited in claim 7, wherein the magnitude of the therapeutic shock is a linear function of the cardiac fibrillation rate.

32. (Currently Amended) A method as recited in claim 7, wherein the magnitude of the therapeutic shock linearly increases with the time since fibrillation onset.

33. (Currently Amended) A method as recited in claim 7, wherein the magnitude of the therapeutic shock is adjusted based on U-shaped correlation with the time duration since last therapeutic shock.

34. (Previously Presented) A method as recited in claim 13, wherein the magnitude of the therapeutic shock is a linear function of the cardiac fibrillation rate.

35. (Currently Amended) A method as recited in claim 13, wherein the magnitude of the therapeutic shock linearly increases with the time since fibrillation onset.

36. (Currently Amended) A method as recited in claim 13, wherein the magnitude of the therapeutic shock is adjusted based on U-shaped correlation with the time duration since last therapeutic shock.

37. (Previously Presented) A method as recited in claim 19, wherein the magnitude of the therapeutic shock varies linearly with the cardiac fibrillation rate.

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38. (Currently Amended) A method as recited in claim 19, wherein the magnitude of the therapeutic shock varies linearly with the time since fibrillation onset.

39. (Currently Amended) A method as recited in claim 19, wherein the magnitude of the therapeutic shock is adjusted based on U-shaped correlation with the time duration since last therapeutic shock.

40. (Currently Cancelled)

41. (Currently Cancelled)

42. (Currently Cancelled)

43. (Currently Cancelled)

44. (Currently Cancelled)

45. (Currently Cancelled)